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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/088,646

08/30/2002

Joseph R. Lakowicz

UNIMD 6

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07/10/2008

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EXAMINER

O SULLIVAN, PETER G

ART UNIT

PAPER NUMBER

1621

MAIL DATE

DELIVERY MODE

07/10/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Claims 1 and 3-19 are pending in this application. The restriction requirement is adhered to for the reasons of record and is hereby made final. Claim 3 is currently held withdrawn. Applicants are again requested to send copies of references mentioned in the reference section of the specification if available to them.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 and 4-17 and 19 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the compound of figure 1, does not reasonably provide enablement for all of applicants' luminophores. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.

Applicants' arguments have been given due consideration, but are found non-persuasive. Applicants disclose donor molecules in broad terms as metal ligand complexes of transition metals while stating those of lanthanides are also possible, but these typically have high yields and point to references disclosing some types of donor - type metal ligand complexes. Applicants' note these are of the di-imine, e.g. bipyridyl type. Regarding the acceptor molecules/portions, applicants state these are dye molecules such as Texas Red, Albumin 633 or 670, CY5, fluorescein dyes, polymethine dyes, cyanine dyes, squarilium dyes, croconium dyes, merocyanine dyes, oxonol dyes and many others. Regarding the spacing moieties, applicants note the closer D and A

are spaced from each other the faster and more efficient will be the resonant energy transfer. Applicants' claim a luminophore based on properties of the donor and acceptor portions in close association and not in close association with each other. The determination of these properties would require undue experimentation on the part of one skilled in the art practicing the invention over the entire scope of the claims. For example, given a specific acceptor portion and donor portion whose properties have to be determined to be deemed suitable, what linker moiety and how long of a linker moiety would be suitable for the specific acceptor and donor portions so as to have the relationship described in claim 1? Applicants do not have a structural formula that will result in an acceptable luminophore.

Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 claims a luminophore having the formula of Figure 13, but figure 13 only lists donors and acceptors.

Claim 18 is allowable, but objected to as dependent on a rejected claim.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to Peter G. O'Sullivan at telephone number (571)272-0642.

/Peter G O'Sullivan/

Primary Examiner, Art Unit 1621